



ENVIRONMENT
AGENCY

Variation Notice with introductory note

Pollution Prevention and Control Regulations 2000

Chirk Particle Board Factory

Kronospan Limited,
Holyhead Road,
Chirk,
Wrexham,
LL14 5NT

Variation Notice number

KP3735SC

Permit number

BW9999IG

Introductory note

This introductory note does not form a part of the Variation Notice

The following Notice is issued under Regulation 17 of The Pollution Prevention and Control (England and Wales) Regulations 2000 (S.I.2000 No. 1973 (as amended) (the Regulations) to vary the conditions of a Permit issued under the Regulations to operate part of an installation.

The Notice comprises Schedule 1 containing conditions to be deleted, Schedule 2 conditions to be amended and Schedule 3 conditions to be added. The Notice is subject to the express conditions set out in Schedules 1 to 3.

The Permit, as amended by this Variation Notice, contains conditions which have to be complied with. It should be noted that aspects of the operation of the installation which are not regulated by those conditions are subject to the condition implied by Regulation 12(10) of the PPC Regulations, that the Operator shall use the best available techniques for preventing or, where that is not practicable, reducing emissions from the installation. Techniques include both the technology used and the way in which the installation is designed, built, maintained, operated and decommissioned.

This variation was issued to correct an error (in Table 2.2.5: Emission Limits to Water and Monitoring) set in Permit BW9999IG for emissions to water of formaldehyde from point W1. The limit (originally set at 1mg/l) should have been set at 2mg/l, as per the Water Resources Act discharge consent CM 0098001.

Formatting errors (incorrect numbering of Section 1.1) in Permit BW9999IG were identified by the Agency, and these have also been corrected in this Variation Notice.

The main purpose of the activities at the Installation are as follows:-

The products that are manufactured by the Operator (Kronospan Limited) at the Chirk Particle Board Factory are laminate flooring, chipboard and medium density fibreboard (MDF). The Chirk site is co-regulated by the Environment Agency and the Local Authority; Wrexham County Borough Council. The listed activities that are regulated by the Agency are the manufacture of formaldehyde by catalytic oxidation of methanol, and the manufacture of urea-formaldehyde and melamine-urea-formaldehyde resins. The activities that are directly associated with these are the VITS Paper Impregnation process, and the Surface Water Lagoons. Wrexham County Borough Council regulates all other areas on the Chirk Particle Board site, including the combustion plants.

The manufacture of formaldehyde is carried out by the oxidation of methanol in air using a molybdenum oxide catalyst. There are two plants in operation of a similar design. The formaldehyde gas is absorbed in water via an absorption column, to produce a 55% solution of formaldehyde. The designs of the plants are in accordance with the Guidance for the Large Volume Organic Chemicals Sector, and as such is considered to be BAT. They consume a combined total of ~50,000 tonnes of methanol per year, producing ~90,000 tonnes of (50–55%) formaldehyde solution per year, for use on site in the resins plant. Emissions to air from the formaldehyde plant have been demonstrated to be 'not significant' within Agency environmental assessment criteria. Releases to water from the plant are via the formaldehyde plant effluent storage tank, containing nominally uncontaminated surface water. This tank is sampled and tested prior to discharge to the Surface Water Lagoons. Reportable limits have been set on this discharge to the Lagoons.

The Resin Plant manufactures a variety of formaldehyde-based resins by means of a semi-batch process. The resin is used on site in the production of various grades of boards. The resins are all formaldehyde-urea, formaldehyde-melamine-urea or formaldehyde-melamine polymers. The plant comprises five reactors, four of them are 15m³ capacity, and one is 46m³ capacity. The reactors are all linked to the VITS Paper Impregnation Plant via the NAIRB scrubber. Emissions levels of particulates and formaldehyde from this scrubber do not exceed Agency benchmark criteria, but are of a sufficient level that improvement conditions have been set.

The Surface Water Lagoons receive surface run-off water from the whole of the Chirk site. The plant consists of two lagoons, located side by side, each 2022m³ in capacity. Effluent is discharged into the River Bradley (Afon Bradley), which is a minor tributary of the River Dee, 2km away. The impact of emissions of ammonia and formaldehyde at the current consent limits have been calculated to be significant in relation to the long term Agency benchmark criteria owing to the relatively low dilution taking place in the River Bradley. During periods of high rainfall there is a large volume of surface water run-off, owing to the size of the catchment area (the site is approximately 100 acres), this volume can place a strain on the operation of the lagoons. Improvement conditions have been set to address the water management issues on this site.

There are no Natura 2000 sites that are adversely affected by the emissions to air or water from this site, and as such they have not been a prime consideration. However the site is located in close proximity to residential housing, which gives rise to receptors that are sensitive to emissions to air.

The Operator achieved certification of an accredited Environmental Management System in March 2005.

Other PPC Permits relating to this installation

| Permit holder | Permit Number | Date of Issue |
|-------------------|------------------------------|---------------|
| Kronospan Limited | WCBC/PPC/KR/1 ⁽¹⁾ | 17/09/04 |

Note 1: - the above permit is issued by Wrexham County Borough Council.

Superseded Licences/Authorisations/Consents relating to this installation

| Holder | Reference Number | Date of Issue |
|--------------------------------|------------------|---------------|
| Kronospan Limited (PPC Permit) | BW9999IG | 17/09/04 |

Talking to us

Please quote the Permit Number if you contact the Agency about this Permit.

To give a Notification under Condition 5.1.1, the Operator should use the Incident Hotline telephone number (0800 80 70 60) or any other number notified in writing to the Operator by the Agency for that purpose.

Confidentiality

The Permit/Variation requires the Operator to provide information to the Agency. The Agency will place the information onto the public registers in accordance with the requirements of the PPC Regulations. If the Operator considers that any information provided is commercially confidential, it may apply to the Agency to have such information withheld from the register as provided in the PPC Regulations. To enable the Agency to determine whether the information is commercially confidential, the Operator should clearly identify the information in question and should specify clear and precise reasons.

Variations to the Permit

This Permit may be varied in the future (by the Agency serving a Variation Notice on the Operator). If the Operator itself wants any of the Conditions of the Permit to be changed, it must submit a formal Application. The Status Log within the Introductory Note to any such Variation Notice will include summary details of this Permit, variations issued up to that point in time and state whether a consolidated version of the Permit has been issued.

Surrender of the Permit

Before this Permit can be wholly or partially surrendered, an Application to surrender the Permit has to be made by the Operator. For the application to be successful, the Operator must be able to demonstrate to the Agency that there is no pollution risk and that no further steps are required to return the site to a satisfactory state.

Transfer of the Permit or part of the Permit

Before the Permit can be wholly or partially transferred to another person, an Application to transfer the Permit has to be made jointly by the existing and proposed holders. A transfer will be allowed unless the Agency considers that the proposed holder will not be the person who will have control over the operation of the installation or will not comply with the conditions of the transferred Permit. If, however, the Permit authorises the carrying out of a specified waste management activity, the transfer will only be allowed if the proposed holder is also considered to be "a fit and proper person" as required by the PPC Regulations.

Status Log

| Detail | Date | Comment |
|---|----------------------------------|---|
| Application BW9999IG | Received 28/11/03 | Duly Made. Supersedes withdrawn application BR7194. |
| Response to request for information via Schedule 4 Notice | Request dated 23/02/04 | Response in part dated 19/04/04 |
| Additional information in response to original Schedule 4 notice. | Information received on 21/05/04 | Noise survey. |
| Re-submission of Schedule 4 response. | Request dated 26/05/04 | Information received on 30/06/04 |
| Permit BW9999IG Issued | 17/09/04 | |
| Variation Notice KP3735SC Issued | 05/04/06 | Re-issue of conditions to account for administrative errors and to change emission limit values from the original Permit. |

End of Introductory Note.

Variation Notice

Pollution Prevention and Control
Regulations 2000



**ENVIRONMENT
AGENCY**

Variation Notice

Permit number (The Permit)

BW9999IG

Variation Notice number

KP3735SC

The Environment Agency in exercise of its powers under Regulation 17 of the Pollution Prevention and Control (England and Wales) Regulations 2000 (S.I. 2000 No. 1973) (as amended), hereby varies the Permit issued on 17/09/04 and held by you.

Kronospan Limited ("the Operator"),

Whose Registered Office is

Kronospan Limited,

Holyhead Road,

Chirk,

Wrexham,

LL14 5NT

Company registration number **981905**

To operate part of an Installation at

Chirk Particle Board Factory

Holyhead Road,

Chirk,

Wrexham,

LL14 5NT

to the extent set out in Schedules 1 to 3 of this Variation Notice.

This Notice shall take effect from 5th April 2006 **at 00.01 hours**.

Signed

Date

| | |
|--|--|
| | |
|--|--|

Paul Nash

Authorised to sign on behalf of the Environment Agency

SCHEDULE 1 - CONDITIONS TO BE DELETED

1. Conditions 1 to 6 inclusive and Schedules 1 to 5 inclusive, in PPC Permit number BW9999IG, issued on 17/09/04 to Kronospan Limited.

SCHEDULE 2 - CONDITIONS TO BE AMENDED

2. None.

SCHEDULE 3 - CONDITIONS TO BE ADDED

3. Conditions 1 to 6 inclusive and Schedules 1 to 5 inclusive to be added, as attached, on pages 3 to 32 of this Variation Notice.

Conditions

1 General

1.1 Permitted Activities

1.1.1 The Operator is authorised to carry out the activities and the associated activities specified in Table 1.1.1.

| Table 1.1.1 | | |
|---|--|---|
| Activity listed in Schedule 1 of the PPC Regulations / Associated Activity | Description of specified activity | Limits of specified activity |
| Section 4.1 A(1) (a) (ii) – producing organic chemicals containing oxygen. | Manufacture of Formaldehyde by catalytic oxidation of methanol. | From receipt of raw materials to intermediate storage of formaldehyde product. |
| Section 4.1 A(1) (a) (viii) – producing organic chemicals such as polymers. | Manufacture of Urea-Formaldehyde and Melamine-Urea-Formaldehyde Resins | From intermediate storage of formaldehyde and receipt of other materials to intermediate storage of resin products. |
| Unlisted Directly Associated activity | VITS Paper impregnation process | From Resin intermediate storage and receipt of other raw materials to intermediate storage of impregnated paper products. |
| Unlisted Directly Associated activity | Surface Water Lagoons | Receipt of site drainage from whole installation and effluent from Formaldehyde Plant, then discharged into the Afon Bradley via valve Penstock A. The effluent from the Formaldehyde Plant includes inputs from the process bunds, tank farm bunds and tanker loading bay. |

1.1.2 Where waste on site is subjected to activities that are exempt from control under the Waste Management Licensing Regulations 1994 then the wastes controlled under condition 1.1.1, above, shall be clearly identified and kept separate from such exempt waste activities and a record shall be kept of where such exempt activities are conducted.

1.2 Site

1.2.1 The activities authorised under condition 1.1.1 shall not extend beyond the Site, being the land shown edged in green on the Site Plan at Schedule 5 to this Permit, which is within the area edged in red on the Site Plan that represents the extent of the installation covered by this Permit and that issued by Wrexham County Borough Council.

1.3 Overarching Management Condition

- 1.3.1 Without prejudice to the other conditions of this Permit, the Operator shall implement and maintain a management system, organisational structure and allocate resources that are sufficient to achieve compliance with the limits and conditions of this Permit.

1.4 Improvement Programme

- 1.4.1 The Operator shall complete the improvements specified in Table 1.4.1 by the date specified in that table, and shall send written notification of the date of completion of each requirement to the Agency within 14 days of the completion of each such requirement.

Table 1.4.1: Improvement programme

| Reference | Requirement | Date |
|-----------|---|-----------|
| 1 | The Operator shall undertake a BAT assessment for the prevention or reduction of emissions of formaldehyde from emission points A1, A5 and A6 in comparison with the benchmark of 5mg/m ³ as set out in the Agency Guidance Note (IPPC S4.01) for the Large Volume Organic Chemicals Sector. The assessment shall include options, impacts to the environment, cost comparisons and a schedule of actions to be implemented. A summary of the assessment shall be sent to the Agency in writing together with a timetable to implement any necessary changes identified. | Completed |
| 2 | The Operator shall undertake a BAT assessment for the prevention or reduction of emissions of methanol from the storage tank vents. The assessment shall include options, impacts to the environment, cost comparisons and a schedule of actions to be implemented. A summary of the assessment shall be sent to the Agency in writing together with a timetable to implement any necessary changes identified. | Completed |
| 3 | The Operator shall carry out a BAT assessment of the formaldehyde tank scrubber system. The assessment shall include options, impacts to the environment, cost comparisons and a schedule of actions to be implemented. A summary of the assessment shall be sent to the Agency in writing together with a timetable to implement any necessary changes identified. | Completed |

Table 1.4.1: Improvement programme (continued)

| Reference | Requirement | Date |
|-----------|--|------------|
| 4 | <p>The Operator shall carry out a BAT assessment of the discharge to River Bradley to prevent or reduce to a minimum the overall impact of the emissions on the environment and the risks to it. The assessment should give priority to identification and treatment of contaminated effluent or surface water at source, and shall aim to reduce the emissions of biochemical oxygen demand, ammonia and formaldehyde to target levels of 9.5mg/l, 3.5mg/l and 0.15mg/l respectively.</p> <p>A summary of the assessment shall be sent to the Agency in writing together with a timetable to implement any necessary changes identified to meet this target.</p> | 30/06/2006 |
| 5 | <p>The Operator shall carry out a Direct Toxicity Assessment of the effluent discharge to the River Bradley in accordance with the Agency Guidance identified in Appendix F of the Horizontal Guidance Note IPPC H1. A summary of the results shall be sent to the Agency in writing, together with a timetable for implementation of any further work identified by the assessment.</p> | Completed |
| 6 | <p>The Operator shall carry out an investigation to determine the levels of monomers released from the resin plant through the air extraction system to the NAIRB scrubber. The investigation may be of the form of monitoring of raw materials, products and emissions, and sampling of product to compare quality. The results of this investigation shall be used to assess the performance of the condensers, the impact of monomers and particulates on the performance of the NAIRB scrubber and identify any improvements that can be made. A summary of the assessment shall be sent to the Agency in writing together with a timetable to implement any necessary changes identified.</p> | Completed |
| 7 | <p>The Operator shall produce and implement an Odour Management Plan to an approved Agency standard, as outlined in the Technical Guidance Note IPPC H4. Confirmation shall be sent in writing to the Agency that the plan has been formulated and implemented. (Document references shall be included). Documents shall be made available for inspection when requested.</p> | Completed |
| 8 | <p>The Operator shall produce and implement a Noise Management Plan in accordance with Agency Guidance. (Horizontal Guidance Note IPPC H3) Confirmation shall be sent in writing to the Agency that a plan has been formulated and implemented. (Document references shall be included). Documents shall be made available for inspection when requested.</p> | Completed |

Table 1.4.1: Improvement programme (continued)

| Reference | Requirement | Date |
|-----------|--|-----------|
| 9 | The Operator shall carry out a BAT assessment of water usage, paying attention to the potential for minimising potable water use and effluent flow, through optimisation of recycling, and the considerations outlined in improvement condition 4 of this document. The assessment shall identify the areas where water usage can be minimised through improved management and process control, or supplemented with recycled water (e.g. operation of the lagoons, or the resin plant). The assessment shall also include a single sheet schematic detailing an overall plant water balance, which shall include normal and design flowrates. A summary of the assessment shall be sent to the Agency in writing together with a timetable to implement any necessary changes identified. | Completed |
| 10 | The Operator shall carry out a review of their waste management systems and procedures, and address the deficiencies highlighted in the Waste Audit (Supporting document No.5) in the permit application. The findings of this review shall be sent to the Agency in writing together with a timetable to implement any necessary changes that are identified. Any relevant waste management procedures and associated documents shall be made available for inspection upon request. | Completed |
| 11 | The Operator shall carry out a BAT assessment of the energy usage of the Installation. The Operator shall provide to the Agency in writing a timescale for the implementation of any recommendations from the BAT assessment, and for any recommendations detailed in the Energy Survey (supporting document 2). Where a recommendation from the Energy Survey is not to be implemented, a justification shall be provided to the Agency taking into account BAT considerations. | Completed |
| 12 | The Operator shall review and update the relevant emergency on-site plans as identified in the Proposed Improvement Programme (Section 6 of the application). A summary of the review shall be sent to the Agency in writing together with a timetable to implement any necessary changes identified. | Completed |

Table 1.4.1: Improvement programme (continued)

| Reference | Requirement | Date |
|-----------|---|---|
| 13 | The Operator shall implement an Environmental Management System that satisfies the requirements set out in Agency Guidance Note (IPPC S4.01) for the Large Volume Organic Chemicals Sector. Confirmation in writing shall be submitted to the Agency when a recognised system has been implemented and certification achieved. If not achieved within this timescale the Operator shall notify the Agency of this and shall make available all Environmental Management System documents for inspection. | Completed |
| 14 | The Operator shall review their emissions monitoring with the intent to achieve MCERTS certification or MCERTS accreditation (as appropriate) or an equivalent standard that is acceptable to the Agency, where confirmation has been agreed in writing beforehand. Measurement methods should be to appropriate standards (examples in Appendix 1, Agency Guidance for Speciality Organic Chemicals, S4.02). Techniques should be in accordance with Agency Guidance Notes M1 and M2. Proposals for a revised emissions monitoring programme shall be sent to the Agency together with an implementation date. | Completed |
| 15 | The Operator shall repeat the Direct Toxicity Assessment of the effluent discharge to the Afon Bradley, using freshwater algal growth, once improvement condition 4 have been completed. A summary of the results shall be sent to the Agency in writing, together with a timetable for implementation of any further work identified by the assessment. | Within 3 months of completion of the improvements implemented following improvement condition 4 |

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- 1.4.2 Where the Operator fails to comply with any requirement by the date specified in Table 1.4.1 the Operator shall send written notification of such failure to the Agency within 14 days of such date.

1.5 Minor Operational Changes

- 1.5.1 The Operator shall seek the Agency's written agreement to any minor operational changes under condition 2.1.1 of this Permit by sending to the Agency: written notice of the details of the proposed change including an assessment of its possible effects (including waste production) on risks to the environment from the Permitted Installation; any relevant supporting assessments and drawings; and the proposed implementation date.
- 1.5.2 Any such change shall not be implemented until agreed in writing by the Agency. As from the agreed implementation date, the Operator shall operate the Permitted Installation in accordance with that change, and relevant provisions in the Application shall be deemed to be amended.

- 1.5.3 When the qualification “unless otherwise agreed in writing” is used elsewhere in this Permit, the Operator shall seek such agreement by sending to the Agency written notice of the details of the proposed method(s) or techniques.
- 1.5.4 Any such method(s) or techniques shall not be implemented until agreed in writing by the Agency. As from the agreed implementation date, the Operator shall operate the Permitted Installation using that method or technique, and relevant provisions in the Application (and the Site Protection and Monitoring Programme, as the case may be) shall be deemed to be amended.

1.6 Pre-Operational Conditions

- 1.6.1 There are no pre-operational conditions

1.7 Off-site Conditions

- 1.7.1 There are off-site monitoring conditions specified by the permit issued by Wrexham County Borough Council.

2 Operating conditions

2.1 In-Process Controls

- 2.1.1 The Permitted Installation shall, subject to the conditions of this Permit, be operated using the techniques and in the manner described in the documentation specified in Table 2.1.1, or as otherwise agreed in writing by the Agency in accordance with conditions 1.5.1 and 1.5.2 of this Permit.

Table 2.1.1: Operating techniques

| Description | Parts | Date Received |
|--|--|---|
| Application for Formaldehyde production plant, resins plant, chipboard and MDF production and effluent treatment | The response to question 2.1 given in pages 7 – 10, and supporting document No.1 of the application. | Application received 28/11/03. |
| Operator responses to the Schedule 4 notice issued on 23/02/04. | Responses to questions 10, 16, 17, 18, 21, 22 and 26. | Schedule 4 responses received by 30/06/04 |

- 2.1.2 The Permitted Installation shall, subject to the other conditions of this Permit, be operated using the techniques and in the manner described in the Site Protection and Monitoring Programme submitted under condition 4.1.7 of this Permit (as amended from time to time under condition 4.1.8), or as otherwise agreed in writing by the Agency.

2.2 Emissions

2.2.1 Emissions to Air, (including heat, but excluding Odour, Noise or Vibration) from Specified Points

- 2.2.1.1 This Part 2.2.1 of this Permit shall not apply to releases of odour, noise or vibration.
- 2.2.1.2 Emissions to air from the emission points in Table 2.2.1 shall only arise from the sources specified in that Table.

Table 2.2.1 : Emission points to air

| Emission point reference or description | Source | Location of emission point |
|---|--|---|
| A1 | Emissions Control System (catalytic oxidiser) – Formaldehyde Plant | Point A1 on the Site Plan. Document reference: Kronospan DRG 7000/282-B (30/03/06) |
| A5 | NAIRB Wet Scrubber – Resin / VITS 2, 3, 5 Paper impregnation plant | Point A5 on the Site Plan. Document reference: Kronospan DRG 7000/282-B (30/03/06) |
| A6 | NAIRB Wet Scrubber –VITS 4 Paper impregnation plant | Point A6 on the Site Plan. Document reference: Kronospan DRG 7000/282-B (30/03/06) |

2.2.1.3 The limits for emissions to air for the parameters and emission points set out in Table 2.2.2 shall not be exceeded.

Table 2.2.2 : Emission limits to air and monitoring

| Emission point reference | Parameter | Limit (including Reference Period) ⁽²⁾ | Monitoring frequency | Monitoring method ⁽³⁾ |
|--------------------------|--|---|----------------------|---|
| A1 | Formaldehyde | 5 mg/m ³ (Note 4) | Every 6 months | 2,4 DNPH impingement technique (NIOSH 2541/2539 procedures) |
| A5 | Formaldehyde | 5 mg/m ³ (Note 4) | Every 6 months | 2,4 DNPH impingement technique (NIOSH 2541/2539 procedures) |
| A5 | Total Volatile Organic Compounds (as Carbon) Class B | 50 mg/m ³ (Note 4) | Every 6 months | As per Operator Letters Dated 31 st August and 1 st November 2005 |
| A5 | Particulates | 20 mg/m ³ (Note 5) | Every 6 months | BS ISO 9096 |
| A6 | Formaldehyde | 5 mg/m ³ (Note 4) | Every 6 months | 2,4 DNPH impingement technique (NIOSH 2541/2539 procedures) |
| A6 | Total Volatile Organic Compounds (as C) Class B | 50 mg/m ³ (Note 4) | Every 6 months | As per Operator Letters Dated 31 st August and 1 st November 2005 |
| A6 | Particulates | 20 mg/m ³ (Note 5) | Every 6 months | BS ISO 9096 |

Note 2: See Section 6 for reference conditions

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Variation Notice and introductory note: the PPC Regulations

Note 3: Monitoring methods may be subject to change, and can be changed by prior agreement in writing from the Environment Agency.

Note 4: Sampling reference period shall be carried out for a minimum of a half hour.

Note 5: Sampling period as defined as defined in measurement method.

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2.2.1.4 No condition applies.

2.2.2 Emissions to water (other than groundwater), including heat, from specified points

2.2.2.1 This Part 2.2.2 of this Permit shall not apply to releases of odour, noise or vibration or to releases to groundwater.

Emissions to water (other than to Sewer)

2.2.2.2 Conditions 2.2.2.3 - 2.2.2.6 shall not apply to emissions to sewer.

2.2.2.3 No emission from the Permitted Installation shall be made to water except via the Operator's on-site effluent treatment plant as specified in this Permit. Emissions to water from the emission point specified in Table 2.2.4 shall only arise from the source specified in that Table.

Table 2.2.4: Emission point to water

| Emission Point Reference or description | Source | Receiving Water |
|---|---|---------------------------------|
| W1 Point W1 on the Site Plan. Document reference: Kronospan DRG 7000/282-B (30/03/06) | Discharge from Surface Water Lagoons via Penstock A valve. | River Bradley (Afon Bradley) |

2.2.2.4 The limits for the emissions to water for the parameters and emission point set out in Table 2.2.5 shall not be exceeded.

2.2.2.5 Where a substance is specified in Table 2.2.5 but no limit is set for it, the concentration of such substance in emissions to water from the relevant emission point shall be no greater than the background concentration.

Table 2.2.5 : Emission limits to water and monitoring

| Emission point reference | Parameter | Limit (including Reference Period) | Monitoring frequency (Note 7) | Monitoring method (Note 8) |
|--------------------------|---------------------------------|------------------------------------|-------------------------------|--|
| W1 | pH | To be in the range of 6 – 9 | Daily (when discharging) | BS 6068-2.50:1995, ISO 10523:1994 |
| W1 | Biochemical Oxygen Demand (BOD) | 20 mg/l (Note 6) | 3 times/week | 5 day ATU @ 20°C BS EN 1899-1 (1998) |
| W1 | Suspended Solids | 100 mg/l (Note 6) | Daily (when discharging) | Dried @ 105°C |
| W1 | Ammonia | 5 mg/l (Note 6) | Daily (when discharging) | BS 6068-2.33:1987 ISO 7150-2 1986 |
| W1 | Oil and grease | 15 mg/l (Notes 6) | Daily (when discharging) | SCA The determination of Hydrocarbon oils in waters by solvent extraction IR absorption and gravimetry. ISBN 011751 7283 |
| W1 | Formaldehyde | 2 mg/l (Note 6) | Daily (when discharging) | SCA The determination of formaldehyde, other volatile aldehydes and alcohols in water |

Note 6: Spot sampling. No spot sample when discharging shall exceed the emission limit value by more than 50%. [The emission limit values shall not be exceeded by more than 10% when considering the average of 5 sets of consecutive results.](#)

Note 7: Spot sampling to be carried out while discharging to the River Bradley, in accordance with Operator procedures.

Note 8: Monitoring methods may be subject to change, and can be changed by prior agreement in writing from the Environment Agency.

2.2.2.6 No condition applies.

Emissions to sewer

2.2.2.7 No condition applies.

2.2.2.8 No condition applies.

2.2.2.9 No condition applies.

2.2.2.10 No condition applies.

2.2.3 Emissions to groundwater

- 2.2.3.1 No emission from the Permitted Installation shall give rise to the introduction into groundwater of any substance in List I (as defined in the Groundwater Regulations 1998 (S.I. 1998 No. 2746)).
- 2.2.3.2 No emission from within the Permitted Installation shall give rise to the introduction into groundwater of any substance in List II (as defined in the Groundwater Regulations 1998 (S.I. 1998 No. 2746)) so as to cause pollution (as defined in the Groundwater Regulations 1998 (S.I. 1998 No. 2746)).
- 2.2.3.3 For substances other than those in List I or II (as defined in the Groundwater Regulations 1998 (SI 1998 No.2746)), the Operator shall use BAT to prevent or where that is not practicable to reduce emissions to groundwater from the Permitted Installation provided always that the techniques used by the Operator shall be no less effective than those described in the Application, where relevant.

2.2.4 Fugitive emissions of substances to air

- 2.2.4.1 The Operator shall use BAT so as to prevent or where that is not practicable to reduce fugitive emissions of substances to air from the Permitted Installation in particular from:
- storage areas
 - buildings
 - pipes, valves and other transfer systems
 - open surfaces
- provided always that the techniques used by the Operator shall be no less effective than those described in the Application, where relevant.
- 2.2.4.2 The Operator shall use BAT so as to prevent or where that is not practicable to reduce emissions of litter from the Permitted Installation provided always that the techniques used by the Operator shall be no less effective than those described in the Application, where relevant.

2.2.5 Fugitive emissions of substances to water and sewer

- 2.2.5.1 Subject to condition 2.2.5.2 below, the Operator shall use BAT so as to prevent or where that is not practicable to reduce fugitive emissions of substances to water (other than Groundwater) and sewer from the Permitted Installation in particular from:
- all structures under or over ground
 - surfacing
 - bunding
 - storage areas
- provided always that the techniques used by the Operator shall be no less effective than those described in the Application, where relevant.

- 2.2.5.2 There shall be no release to water that would cause a breach of an EQS established by the UK Government to implement the Dangerous Substances Directive 76/464/EEC.

2.2.6 Odour

- 2.2.6.1 The Operator shall use BAT so as to prevent or where that is not practicable to reduce odorous emissions from the Permitted Installation, in particular by:
- limiting the use of odorous materials
 - restricting odorous activities
 - controlling the storage conditions of odorous materials
 - controlling processing parameters to minimise the generation of odour
 - optimising the performance of abatement systems
 - timely monitoring, inspection and maintenance
 - employing, where appropriate, an approved odour management plan

provided always that the techniques used by the Operator shall be no less effective than those described in the Application, where relevant.

- 2.2.6.2 No condition applies.

- 2.2.6.3 No condition applies.

2.2.7 Emissions to Land

- 2.2.7.1 This Part 2.2.7 of this Permit shall not apply to emissions to groundwater.

- 2.2.7.2 No emission from the Permitted installation shall be made to land.

- 2.2.7.3 No condition applies.

2.2.8 Equivalent Parameters or Technical Measures

- 2.2.8.1 The Operator shall comply with the requirements specified in Table 2.2.11, which supplement or replace emission limit values in accordance with Regulation 12(8) of the PPC Regulations.

Table 2.2.11 Equivalent parameters and technical measures

| Parameter or measure | Requirement or description of measure, and frequency if relevant |
|---|---|
| Catalytic performance by temperature measurement of the Emissions Control System catalyst bed (catalytic oxidiser) – Formaldehyde Plant | Continuous temperature measurement taken of the catalyst bed at point A1. Results to be recorded daily (as a minimum) when the Plant is operational. |

2.3 Management

- 2.3.1 A copy of this Permit and those parts of the application referred to in this Permit shall be available, at all times, for reference by all staff carrying out work subject to the requirements of the Permit.

Training

- 2.3.2 The Permitted Installation shall be supervised by staff who are suitably trained and fully conversant with the requirements of this Permit.
- 2.3.3 All staff shall be fully conversant with those aspects of the Permit conditions, which are relevant to their duties and shall be provided with adequate professional technical development and training and written operating instructions to enable them to carry out their duties.
- 2.3.4 The Operator shall maintain a record of the skills and training requirements for all staff whose tasks in relation to the Permitted Installation may have an impact on the environment and shall keep records of all relevant training.

Maintenance

- 2.3.5 All plant and equipment used in operating the Permitted Installation, the failure of which could lead to an adverse impact on the environment, shall be maintained in good operating condition.
- 2.3.6 The Operator shall maintain a record of relevant plant and equipment covered by condition 2.3.5 and for such plant and equipment:
- 2.3.6.1 a written or electronic maintenance programme; and
 - 2.3.6.2 records of its maintenance.

Incidents and Complaints

- 2.3.7 The Operator shall maintain and implement written procedures for:
- 2.3.7.1 taking prompt remedial action, investigating and reporting actual or potential non-compliance with operating procedures or emission limits; and if such events occur
 - 2.3.7.2 investigating incidents, (including any malfunction, breakdown or failure of plant, equipment or techniques, down time, any short term and long term remedial measures and near misses) and prompt implementation of appropriate actions; and
 - 2.3.7.3 ensuring that detailed records are made of all such actions and investigations.
- 2.3.8 The Operator shall record and investigate complaints concerning the Permitted Installation's effects or alleged effects on the environment. The record shall give the date and nature of complaint, time of complaint, name of complainant (if given), a summary of any investigation and the results of such investigation and any actions taken.

2.4 Efficient use of raw materials

- 2.4.1 The Operator shall -

- 2.4.1.1 maintain the raw materials table or description submitted in response to Section 2.4 of the Application and in particular consider on a periodic basis whether there are suitable alternative materials to reduce environmental impact;
- 2.4.1.2 carry out periodic waste minimisation audits and water use efficiency audits. If such an audit has not been carried out in the 2 years prior to the issue of this Permit, then the first such audit shall take place within 2 years of its issue. The methodology used and an action plan for increasing the efficiency of the use of raw materials or water shall be submitted to the Agency within 2 months of completion of each such audit and a review of the audit and a description of progress made against the action plan shall be submitted to the Agency at least every 4 years thereafter; and
- 2.4.1.3 ensure that incoming water use is directly measured and recorded.

2.5 Waste Storage and Handling

- 2.5.1 The Operator shall design, maintain and operate all facilities for the storage and handling of waste on site such that there are no releases to water or land during normal operation and that emissions to air and the risk of accidental release to water or land are minimised.

2.6 Waste recovery or disposal

- 2.6.1 Waste produced at the Permitted Installation shall be:
 - 2.6.1.1 recovered to no lesser extent than described in the Application; and
 - 2.6.1.2 where not recovered, disposed of while avoiding or reducing any impacts on the environment provided always that this is not done in any way that would have a greater effect on the environment than that described in the Application.
- 2.6.2 The Operator shall maintain the waste recovery or disposal table or description submitted in response to Section 2.6 of the Application and in particular identify the best practicable environmental options for waste disposal.
- 2.6.3 The Operator shall maintain and implement a system which ensures that a record is made of the quantity, composition, origin, destination (including whether this is a recovery or disposal operation) and where relevant removal date of any waste that is produced at the Permitted Installation.
- 2.6.4 The Operator shall maintain and implement a system which ensures that a record is made of the quantity, composition, origin and delivery date of any waste that is received for disposal or recovery at the Permitted Installation.

2.7 Energy Efficiency

- 2.7.1 The Operator shall produce a report on the energy consumed at the Permitted Installation over the previous calendar year, by 31 January each year, providing the information required by condition 4.1.2.
- 2.7.2 The Operator shall maintain and update annually an energy management system, which shall include, in particular, the monitoring of energy flows and targeting of areas for improving energy efficiency.
- 2.7.3 The Operator shall design, maintain and operate the Permitted Installation so as to secure energy efficiency, taking into account relevant guidance including the Agency's Energy Efficiency Horizontal Guidance Note H2 as from time to time amended. Energy efficiency shall be secured in particular by:
- ensuring that the appropriate operating and maintenance systems are in place;
 - ensuring that all plant is adequately insulated to minimise energy loss or gain;
 - ensuring that all appropriate containment methods, (e.g. seals and self-closing doors) are employed and maintained to minimise energy loss;
 - employing appropriate basic controls, such as simple sensors and timers, to avoid unnecessary discharge of heated water or air;
 - where building services constitute more than 5% of the total energy consumption of the installation, identifying and employing the appropriate energy efficiency techniques for building services, having regard in particular to the Building services part of the Agency's Energy Efficiency Horizontal Guidance Note H2; and
 - maintaining and implementing an energy efficiency plan which identifies energy saving techniques that are applicable to the activities and their associated environmental benefit and prioritises them, having regard to the appraisal method in the Agency's Energy Efficiency Horizontal Guidance Note H2.

2.8 Accident prevention and control

- 2.8.1 The Operator shall maintain and implement when necessary the accident management plan submitted or described in response to Section 2.8 of the Application. The plan shall be reviewed at least every 2 years or as soon as practicable after an accident, whichever is the earlier, and the Agency notified of the results of the review within 2 months of its completion.

2.9 Noise and Vibration

- 2.9.1 The Operator shall use BAT so as to prevent or where that is not practicable to reduce emissions of noise and vibration from the Permitted Installation, in particular by:

- equipment maintenance, eg. of fans, pumps, motors, conveyors and mobile plant;
- use and maintenance of appropriate attenuation, eg. silencers, barriers, enclosures;
- timing and location of noisy activities and vehicle movements;
- periodic checking of noise emissions, either qualitatively or quantitatively; and
- maintenance of building fabric,

provided always that the techniques used by the Operator shall be no less effective than those described in the Application, where relevant.

2.9.2 Emergency generators/ alarms/ sirens/ relief valves shall only be tested between the hours of 09.00 and 17.00 Monday to Friday and not on any Public Holiday.

2.9.3 No condition applies.

2.10 On-site Monitoring

2.10.1 The Operator shall maintain and implement an emissions monitoring programme which ensures that emissions are monitored from the specified points, for the parameters listed in and to the frequencies and methods described in Tables 2.2.2 and 2.2.5, unless otherwise agreed in writing, and that the results of such monitoring are assessed. The programme shall ensure that monitoring is carried out under an appropriate range of operating conditions.

2.10.2 The Operator shall carry out environmental or other specified substance monitoring to the frequencies and methods described in Table 2.10.1.

Table 2.10.1 : Other monitoring requirements

| Emission point reference or source or description of point of measurement | Substance or parameter | Monitoring frequency | Monitoring method | Other specifications |
|--|------------------------|--------------------------|---------------------------|----------------------|
| W1 Point W1 on the Site Plan. Document reference: Kronospan DRG 7000/282-B (30/03/06) | Discharge volume | Daily (when discharging) | As agreed with the Agency | |

2.10.3 No condition applies.

2.10.4 No condition applies.

2.10.5 The Operator shall notify the Agency at least 14 days in advance of undertaking monitoring and/ or spot sampling, where such notification has been requested in writing by the Agency.

- 2.10.6 The Operator shall maintain records of all monitoring taken or carried out (this includes records of the taking and analysis of samples instrument measurements (periodic and continual), calibrations, examinations, tests and surveys) and any assessment or evaluation made on the basis of such data.
- 2.10.7 Monitoring equipment, techniques, personnel and organisations employed for the emissions monitoring programme in condition 2.10.1 of this Permit shall have either MCERTS certification or MCERTS accreditation (as appropriate) unless otherwise agreed in writing.
- 2.10.8 There shall be provided:
- 2.10.8.1 safe and permanent means of access to enable sampling/monitoring to be carried out in relation to the emission points specified in Schedule 2 to this Permit, unless otherwise specified in that Schedule; and
 - 2.10.8.2 safe means of access to other sampling/monitoring points when required by the Agency.
- 2.10.9 The Operator shall carry out the on-going monitoring identified in the Site Protection and Monitoring Programme submitted under condition 4.1.7, unless otherwise agreed in writing by the Agency.
- 2.10.10 The Operator shall, within 6 months of the issue of this Permit, in accordance with and using the format given in the Land Protection Guidance:
- 2.10.10.1 collect the site reference data identified in the Site Protection and Monitoring Programme submitted under condition 4.1.7, and
 - 2.10.10.2 report that site reference data to the Agency,
 - unless otherwise agreed in writing by the Agency.

2.11 Closure and Decommissioning

- 2.11.1 The Operator shall maintain and operate the Permitted Installation so as to prevent or minimise any pollution risk, including the generation of waste, on closure and decommissioning in particular by:-
- 2.11.1.1 attention to the design of new plant or equipment;
 - 2.11.1.2 the maintenance of a record of any events which have, or might have, impacted on the condition of the site along with any further investigation or remediation work carried out; and
 - 2.11.1.3 the maintenance of a site closure plan to demonstrate that the installation can be decommissioned avoiding any pollution risk and returning the site of operation to a satisfactory state.
- 2.11.2 Notwithstanding condition 2.11.1 of this Permit, the Operator shall carry out a full review of the Site Closure Plan at least every 4 years.
- 2.11.3 The site closure plan shall be implemented on final cessation or decommissioning of the Permitted activities or part thereof.

- 2.11.4 The Operator shall give at least 30 days written notice to the Agency before implementing the site closure plan.

2.12 Multiple Operator installations

- 2.12.1 This is not a multi-Operator installation

2.13 Transfer to effluent treatment plant

- 2.13.1 Transfers to effluent treatment plant shall occur only from the point specified in Table 2.13.1 and transfers from this points shall arise only from the source and shall be released only to the treatment plant specified in that Table.

Table 2.13.1 Transfer point(s) to effluent treatment plant(s)

| Transfer point description/ identifier | Source | Effluent Treatment Plant |
|--|--|--------------------------|
| E1 Point E1 on the Site Plan. Document reference: Kronospan DRG 7000/282-B (30/03/06) | Formaldehyde Plant Effluent Tank Outlet | Surface Water Lagoons |

- 2.13.2 The limits for transfers to effluent treatment plant for the parameters and transfer point set out in Table 2.13.2 shall not be exceeded.

Table 2.13.2 Limits for transfers to effluent treatment plant(s)

| Parameter | Transfer Point | Limit (incl reference period) | Monitoring frequency (Note 10) | Monitoring Method |
|------------------|----------------|-------------------------------|--------------------------------------|--|
| Formaldehyde | E1 | 1.0mg/l (Note 9) | Daily (prior to discharging) | SCA The determination of Formaldehyde, other volatile aldehydes and alcohols in water |
| pH | E1 | To be in the range of 6 – 9 | Daily (prior to discharging) | BS 6068-2.50:1995, ISO 10523:1994 |
| Oil and grease | E1 | 15mg/l (Note 9) | Daily (prior to discharging) | SCA The determination of Hydrocarbon oils in waters by solvent extraction IR absorption and gravimetry. ISBN 011751 7283 |
| Discharge volume | E1 | - | Daily (before and after discharging) | Flow measurement or tank volume change. |

Note 9: Spot sampling. No spot sample shall exceed the emission limit value by more than 50% and the weekly average of these results shall not exceed the limit by more than 10%.

Note 10: Sampling to be carried out prior to discharging to the Surface Water Lagoons, in accordance with Operator procedures.

3 Records

- 3.1 The Operator shall ensure that all records required to be made by this Permit and any other records made by it in relation to the operation of the Permitted Installation shall:-
- 3.1.1 be made available for inspection by the Agency at any reasonable time;
 - 3.1.2 be supplied to the Agency on demand and without charge;
 - 3.1.3 be legible;
 - 3.1.4 be made as soon as reasonably practicable;
 - 3.1.5 indicate any amendments which have been made and shall include the original record wherever possible;
 - 3.1.6 be retained at the Permitted Installation, or other location agreed by the Agency in writing, for a minimum period of 4 years from the date when the records were made, unless otherwise agreed in writing; and
 - 3.1.7 where they concern the condition of the site of the Installation or are related to the implementation of the Site Protection and Monitoring Programme, be kept at the Permitted Installation, or other location agreed by the Agency in writing, until all parts of the Permit have been surrendered.

4 Reporting

- 4.1.1 All reports and written and or oral notifications required by this Permit and notifications required by Regulation 16 of the PPC Regulations shall be made or sent to the Agency using the contact details notified in writing to the Operator by the Agency.
- 4.1.2 The Operator shall, unless otherwise agreed in writing, submit reports of the monitoring and assessment carried out in accordance with the conditions of this permit, as follows:-
 - 4.1.2.1 in respect of the parameters and emission points specified in Table S2 to Schedule 2;
 - 4.1.2.2 for the reporting periods specified in Table S2 to Schedule 2 and using the forms specified in Table S3 to Schedule 3;
 - 4.1.2.3 giving the information from such results and assessments as may be required by the forms specified in those Tables; and
 - 4.1.2.4 to the Agency within 28 days of the end of the reporting period.
- 4.1.3 The Operator shall submit to the Agency a report on the performance of the Permitted Installation over the previous year, by 31 January each year, providing the information listed in Tables S4.1 and S4.2 of Schedule 4, assessed at any frequency specified therein, and using the form specified in Table S3 to Schedule 3.
- 4.1.4 The Operator shall review fugitive emissions, having regard to the application of Best Available Techniques, on an annual basis, or such other period as shall be agreed in writing by the Agency, and a summary report on this review shall be sent to the Agency detailing such releases and the measures taken to reduce them within 3 months of the end of such period.
- 4.1.5 Where the Operator has a formal environmental management system applying to the Permitted Installation which encompasses annual improvement targets the Operator shall, not later than 31 January in each year, provide a summary report of the previous year's progress against such targets.
- 4.1.6 The Operator shall, within 6 months of receipt of written notice from the Agency, submit to the Agency a report assessing whether all appropriate preventive measures continue to be taken against pollution, in particular through the application of the best available techniques, at the installation. The report shall consider any relevant published technical guidance current at the time of the notice which is either supplied with or referred to in the notice, and shall assess the costs and benefits of applying techniques described in that guidance, or otherwise identified by the Operator, that may provide environmental improvement.
- 4.1.7 The Operator shall, within two months of the date of this permit, submit a detailed Site Protection and Monitoring Programme, in accordance with and using the appropriate template format given in the Land Protection Guidance.
- 4.1.8 The Operator shall maintain the Site Protection and Monitoring Programme (SPMP) submitted under condition 4.1.7, and shall carry out regular reviews of it. The results of such reviews and any changes made to the SPMP shall be reported to the Agency within 1 month of the review or change.

5 Notifications

5.1.1 The Operator shall notify the Agency **without delay** of:-

- 5.1.1.1 the detection of an emission of any substance which exceeds any limit or criterion in this Permit specified in relation to the substance;
- 5.1.1.2 the detection of any fugitive emission which has caused, is causing or may cause significant pollution unless the quantity emitted is so trivial that it would be incapable of causing significant pollution;
- 5.1.1.3 the detection of any malfunction, breakdown or failure of plant or techniques which has caused, is causing or has the potential to cause significant pollution; and
- 5.1.1.4 any accident which has caused, is causing or has the potential to cause significant pollution.

5.1.2 The Operator shall submit written confirmation to the Agency of any notification under condition 5.1.1, by sending:-

- 5.1.2.1 the information listed in Part A of Schedule 1 to this Permit within 24 hours of such notification; and
- 5.1.2.2 the more detailed information listed in Part B of that Schedule as soon as practicable thereafter;

and such information shall be in accordance with that Schedule.

5.1.3 The Operator shall give written notification as soon as practicable prior to any of the following:-

- 5.1.3.1 permanent cessation of the operation of part or all of the Permitted Installation;
- 5.1.3.2 cessation of operation of part or all of the Permitted Installation for a period likely to exceed 1 year; and
- 5.1.3.3 resumption of the operation of part or all of the Permitted Installation after a cessation notified under condition 5.1.3.2.

5.1.4 The Operator shall notify the Agency, as soon as reasonably practicable, of any information concerning the state of the Site which adds to that provided to the Agency as part of the Application or to that in the Site Protection and Monitoring Programme submitted under condition 4.1.7 of this Permit.

5.1.5 The Operator shall notify the following matters to the Agency in writing within 14 days of their occurrence:-

- 5.1.5.1 where the Operator is a registered company:-
 - any change in the Operator's trading name, registered name or registered office address;
 - any change to particulars of the Operator's ultimate holding company (including details of an ultimate holding company where an Operator has become a subsidiary)
 - any steps taken with a view to the Operator going into administration, entering into a company voluntary arrangement or being wound up;
- 5.1.5.2 where the Operator is a corporate body other than a registered company:
 - any change in the Operator's name or address;
 - any steps taken with a view to the dissolution of the Operator.
- 5.1.5.3 In any other case: -
 - the death of any of the named Operators (where the Operator consists of more than

one named individual);

- any change in the Operator's name(s) or address(es);
- any steps taken with a view to the Operator, or any one of them, going into bankruptcy, entering into a composition or arrangement with creditors, or, in the case them being in a partnership, dissolving the partnership;

5.1.6 Where the Operator has entered into a Climate Change Agreement with the Government, the Operator shall notify the Agency within one month of:-

5.1.6.1 a decision by the Secretary of State not to re-certify that Agreement.

5.1.6.2 a decision by either the Operator or the Secretary of State to terminate that agreement.

5.1.6.3 any subsequent decision by the Secretary of State to re-certify such an Agreement.

5.1.7 Where the Operator has entered into a Direct Participant Agreement in the Emissions Trading Scheme which covers emissions relating to the energy consumption of the activities, the Operator shall notify the Agency within one month of:-

5.1.7.1 a decision by the Operator to withdraw from or the Secretary of State to terminate that agreement.

5.1.7.2 a failure to comply with an annual target under that Agreement at the end of the trading compliance period.

5.1.8 The Operator shall notify the Agency in writing of any known or planned introduction or material change in respect to emissions from the permitted installation to water, that may increase or introduce into the effluent any "dangerous substance" as defined in List I and List II of the Dangerous Substances Directive 76/464/EEC and its daughter Directives.

6 Interpretation

6.1.1 In this Permit, the following expressions shall have the following meanings:-

"Application" means the application for this Permit, together with any response to a notice served under Schedule 4 to the PPC Regulations and any operational change agreed under the conditions of this Permit.

"background concentration" means such concentration of that substance as is present in:

- water supplied to the site; or
- where more than 50% of the water used at the site is directly abstracted from ground or surface water on site, the abstracted water; or
- where the Permitted Installation uses no significant amount of supplied or abstracted water, the precipitation on to the site.

"BAT" means best available techniques means the most effective and advanced stage of development of activities and their methods of operation which indicates the practical suitability of particular techniques to prevent and where that is not practicable to reduce emissions and the impact on the environment as a whole. For these purposes: "available techniques" means "those techniques which have been developed on a scale which allows implementation in the relevant industrial sector, under economically and technically viable conditions, taking into consideration the cost and advantages, whether or not the techniques are used or produced inside the United Kingdom, as long as they are reasonably accessible to the operator"; "best" means "in relation to techniques, the most effective in achieving a high general level of protection of the environment as a whole" and "techniques" "includes both the technology used and the way in which the installation is designed, built, maintained, operated and decommissioned". In addition, Schedule 2 of the PPC Regulations has effect in relation to the determination of BAT.

"Biochemical Oxygen Demand" means biochemical oxygen demand ('BOD') measured after 5 days at 20°C with nitrification suppressed by the addition of allyl-thiourea.

"Class A" or *"Class B"* in relation to volatile organic compounds is as defined in Agency Guidance for Large Volume Organic Chemicals S4.01, Appendix 3.

"Fugitive emission" means an emission to air or water (including sewer) from the Permitted Installation which is not controlled by an emission or background concentration limit under conditions 2.2.1.3, 2.2.2.4, 2.2.2.5, 2.2.2.8 or 2.2.2.9 of this Permit.

"Groundwater" means all water which is below the surface of the ground in the saturation zone and in direct contact with the ground or subsoil.

"Land Protection Guidance" means the version of the Agency guidance note "H7 - Guidance on the Protection of Land under the PPC Regime: Application Site Report and Site Protection and Monitoring Programme", including its appended templates for data reporting, which is current at the time of issue of the Permit.

" $L_{Aeq,T}$ " means the equivalent continuous A-weighted sound pressure level in dB determined over time period, T.

" $L_{A90,T}$ " means the A-weighted sound pressure level in dB exceeded for 90% of the time period, T.

" L_{AFmax} " means the maximum A weighted sound level measurement in dB measured with a fast time weighting.

"MCERTS" means the Environment Agency's Monitoring Certification Scheme.

"Monitoring" includes the taking and analysis of samples, instrumental measurements (periodic and continual), calibrations, examinations, tests and surveys.

"Permitted Installation" means the activities and the limits to those activities described in Table 1.1.1 of this Permit.

"PPC Regulations" means the Pollution, Prevention and Control (England and Wales) Regulations SI 2000 No.1973 (as amended) and words and expressions defined in the PPC Regulations shall have the same meanings when used in this Permit save to the extent they are specifically defined in this Permit.

"Every 6 months" for reporting/sampling means after/during each 6 month period, January to June; July to December and, when sampling, with at least 8 weeks between each sampling date.

"Quarterly" for reporting/sampling means after/during each 3 month period, January to March; April to June; July to September and October to December and, when sampling, with at least 4 weeks between each sampling date.

"Weekly average" means, for sampling purposes, the average of the set samples obtained over a period of 7 days starting each Monday at 7.30 am.

"Daily" means, for sampling purposes, a 24 hour period starting at 7.30 am.

"Sewer" means sewer within the meaning of section 219(1) of the Water Industry Act 1991.

"Staff" includes employees, directors or other officers of the Operator, and any other person under the Operator's direct or indirect control, including contractors.

"VOCs" means volatile organic compounds as defined in Agency Guidance for Large Volume Organic Chemicals S4.01, Appendix 3.

"Year" means calendar year ending 31 December.

"mg/m³" means milligramme per cubic metre.

"µg/l" means microgramme per litre.

"mg/l" means milligramme per litre.

"kg" means kilogramme.

"t" means tonne.

6.1.2 Where a minimum limit is set for any emission parameter, for example pH, reference to exceeding the limit shall mean that the parameter shall not be less than that limit.

6.1.3 Unless otherwise stated, any references in this Permit to concentrations of substances in emissions into air means: -

6.1.3.1 in relation to gases from combustion processes, the concentration in dry air at a temperature of 273K, at a pressure of 101.3 kPa and with an oxygen content of 3% dry for liquid and gaseous fuels, 6% dry for solid fuels; and 11% for catalytic oxidation and incineration processes.

6.1.3.2 in relation to gases from non-combustion sources, the concentration at a temperature of 273K and at a pressure of 101.3 kPa, with no correction for water vapour content.

6.1.4 Where any condition of this Permit refers to the whole or parts of different documents, in the event of any conflict between the wording of such documents, the wording of the document(s) with the most recent date shall prevail to the extent of such conflict.

Schedule 1 - Notification of abnormal emissions

This page outlines the information that the Operator must provide to satisfy conditions 5.1.1 and 5.1.2 of this Permit.

Units of measurement used in information supplied under Part A and B requirements shall be appropriate to the circumstances of the emission. Where appropriate, a comparison should be made of actual emissions and authorised emission limits.

If any information is considered commercially confidential, it should be separated from non-confidential information, supplied on a separate sheet and accompanied by an application for commercial confidentiality under the provisions of the PPC Regulations.

Part A

| | |
|-------------------------------|---|
| Permit Number | BW9999IW / BW9999IG (and Variation KP3735SC} |
| Name of Operator | Kronospan Limited |
| Location of Installation | Holyhead Road, Chirk, Wrexham |
| Location of the emission | |
| Time and date of the emission | |

| Substance(s) emitted | Media | Best estimate of the quantity or the rate of emission | Time during which the emission took place |
|----------------------|-------|---|---|
| | | | |
| | | | |

| | |
|---|--|
| Measures taken, or intended to be taken, to stop the emission | |
|---|--|

Part B

| | |
|--|--|
| Any more accurate information on the matters for notification under Part A. | |
| Measures taken, or intended to be taken, to prevent a recurrence of the incident | |
| Measures taken, or intended to be taken, to rectify, limit or prevent any pollution of the environment or harm which has been or may be caused by the emission | |
| The dates of any unauthorised emissions from the installation in the preceding 24 months. | |

| | |
|-----------|--|
| Name* | |
| Post | |
| Signature | |
| Date | |

* authorised to sign on behalf of Kronospan Limited

Schedule 2 - Reporting of monitoring data

Parameters for which reports shall be made, in accordance with conditions 4.1.2 and 4.1.3 of this Permit, are listed below.

| Table S2: Reporting of monitoring data | | | |
|---|--|------------------|---------------|
| Parameter | Emission point | Reporting period | Period begins |
| Formaldehyde mg/m ³ | A1, A5, A6 | Every 6 months | 01/07/06 |
| Total VOCs (as carbon) mg/m ³ | A5, A6 | Every 6 months | 01/07/06 |
| Particulates mg/m ³ | A5, A6 | Every 6 months | 01/07/06 |
| Biochemical oxygen demand mg/l | W1 | Quarterly | 01/04/06 |
| Suspended solids mg/l | W1 | Quarterly | 01/04/06 |
| Formaldehyde mg/l | W1 | Quarterly | 01/04/06 |
| Ammonia mg/l | W1 | Quarterly | 01/04/06 |
| Discharge volume | W1 | Quarterly | 01/04/06 |
| pH | W1 | Quarterly | 01/04/06 |
| Oil and Grease | W1 | Quarterly | 01/04/06 |
| Formaldehyde mg/l | E1 | Quarterly | 01/01/06 |
| Discharge volume | E1 | Quarterly | 01/01/06 |
| Oil and Grease | E1 | Quarterly | 01/01/06 |
| pH | E1 | Quarterly | 01/01/06 |
| Water usage | Permitted Installation (potable and abstractions) | Every 6 months | 01/01/06 |
| Energy usage | Permitted installation | Every 6 months | 01/01/06 |
| Waste disposal and/or recovery. | Permitted installation | Every 6 months | 01/01/06 |

Schedule 3 - Forms to be used

| Table S3: Reporting Forms | | |
|---------------------------|-------------|--------------|
| Media / parameter | Form Number | Date of Form |
| Air | A1 | 15/03/06 |
| Water (excluding sewer) | W1 | 15/03/06 |
| Effluent Transfer | E1 | 15/03/06 |
| Waste Return | R1 | 15/03/06 |
| Water usage | WU1 | 15/03/06 |
| Energy | EN1 | 15/03/06 |
| Performance Indicators | P1 | 15/03/06 |

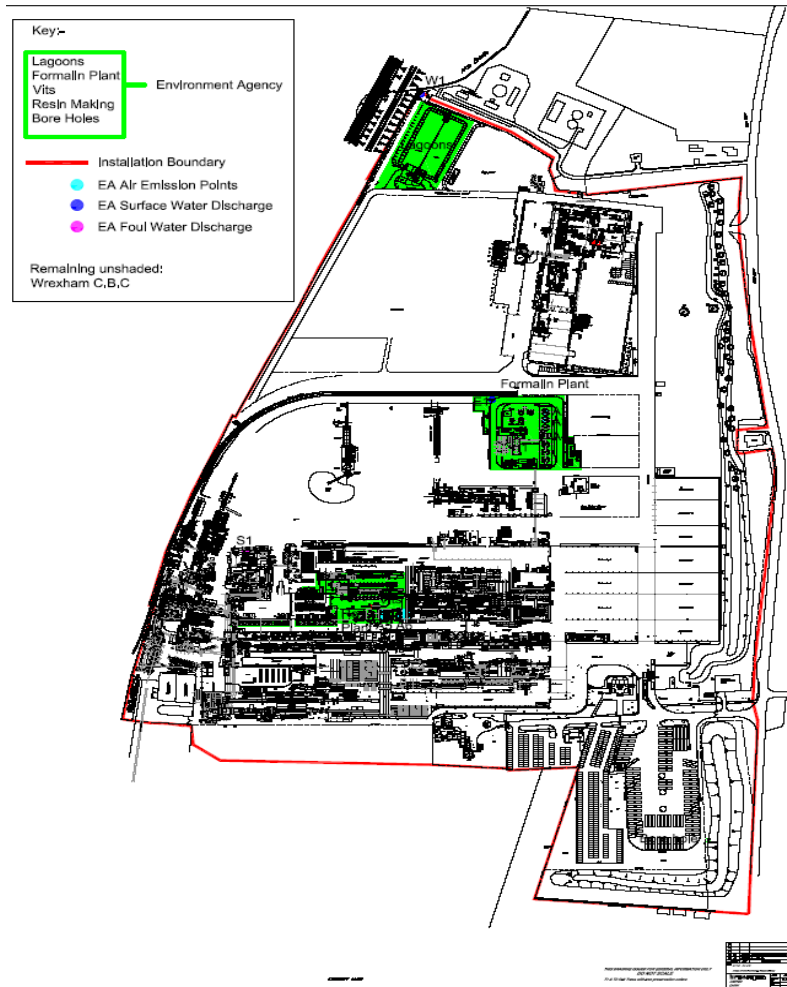
Schedule 4 - Reporting of performance data

Data required to be recorded and reported by Condition 4.1.3. The data should be assessed at the frequency given and reported annually to the Agency.

| Table S4.1: Annual Production/Treatment | |
|---|--|
| Production of formaldehyde (tonnes) | |
| Production of resin (tonnes) | |
| Total discharge volume to Water(other than Sewer) from point W1 (m ³) | |

| Table S4.2: Performance parameters | | |
|--|-------------------------|-----------------------|
| Parameter | Frequency of assessment | Performance indicator |
| Total BOD emission to Water (other than Sewer) from W1 | Quarterly | kg |
| Total amount of methanol received into storage tanks. | Quarterly | tonnes |
| Total VOCs released – points A5 and A6 | Quarterly | tonnes |
| Ratio of methanol raw material / formaldehyde produced | Quarterly | |
| Ratio of formaldehyde raw material / resin produced | Quarterly | |

Schedule 5 - Site Plan-



Note: Further detail of the Site Boundaries and Emission Points can be found on the original drawing from which this was copied. This drawing was submitted on 30/03/06, reference: Drawing number 7000/282-B (30/03/06) Areas of Environmental Responsibility.

END OF VARIATION NOTICE